



Industrial de Valvulas, S.A de C.V.  
 Av. de La Industria Lote 16 Fracc. Industrial El Trebol  
 Tepic, Jalisco, Estado de Mexico C.P. 54600

(Numero) Number V08C11008  
 (Fecha) Date 01/02/2008

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

### ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS:  
 (CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PRABADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES.)

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|--|--|---|--|
| API 598<br>API 599<br>ANSI B16-10<br>ANSI B16-34<br>MSS-SP61 | - VALVE INSPECTION AND TESTING<br>- METAL PLUG VALVES - FLANGED, THREADED AND WELDING<br>- FACE TO FACE AND END TO END DIMENSIONS OF VALVES<br>- VALVES - FLANGED, THREADED AND WELDING ENDS<br>- PRESSURE TESTING OF STEEL VALVES | API 6D<br>API 600<br>ANSI B16-11<br>API 602 | - PIPELINE VALVES - GATE, PLUG, BALL ANF CHECK<br>- STEEL GATE VALVES, FLANGED AND WELDING ENDS<br>- FORGED FITTINGS, SOCKET - WELDING AND THREADED<br>- COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS |
|--|--|---|--|

**Part No. AC022A08MAB**  
 (Codigo)  
**Description 2 1/2" Fig. 5206 F UT WCB, API TRIM No.8 830000M**  
 (Descripción)  
**CAST STEEL GATE VALVE**  
 (VALVULA COMPUERTA DE ACERO FUNDIDO)  
 VALVE WITH LOW EMISSION CONTROL  
 (VALVULA SUMINISTRADA CON CONTROL DE EMISIONES FUGITIVAS A 50 PPM'S MAX)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)
HYDROSTATIC (PSI) (HIDROSTATICA)	1125	1125	N A N A
PNEUMATIC (PSI) (NEUMATICA)	80	80	80

#### CHEMICAL COMPOSITION (%)

ITEM (PARTES)	HEAT No. (CODADA)	MATERIAL (ASTM)	COMPOSICIÓN QUIMICA (%)														
			C	Min	P	S	SI	NI	Cr	Mo	Cu	V	Cb				
<b>BONNET</b>	WH19929	ASTM A-216/WCB	0.213	0.883	0.019	0.017	0.523	0.044	0.040	0.020	0.029	0.004	84.83	54.67	30	45	150
<b>BONNET</b>	WH19929	ASTM A-216/WCB	Normalized to (Normalized a) 920 °C														
<b>BODY</b>	WH18034	ASTM A-216/WCB	0.190	0.941	0.022	0.020	0.398	0.039	0.048	0.018	0.018	0.003	77.29	54.96	34	48	155
<b>BODY</b>	WH18034	ASTM A-216/WCB	Normalized to (Normalized a) 930 °C														
<b>WEDGE</b>	D3665	ASTM A-217/CA15	0.090	0.780	0.010	0.018	0.910	0.880	13.000	0.020	0.019	0.001	98.46	71.34	27	46	278
<b>WEDGE</b>	D3665	ASTM A-217/CA15	Normalized to (Normalized to) 955 °C														
<b>DISCO</b>			Temple a (Temper to) 630 °C														
			Enfriado en aire.(Enfriado en aire. (C)														

#### MECHANICAL TESTS (PROP. MECANICAS)

ITEM (PARTES)	HEAT No. (CODADA)	MATERIAL (ASTM)	TENS					YIELD	ELG	RED	BHN
			KPSI	CVN@	KPSI	1ST	%				
<b>BONNET</b>	WH19929	ASTM A-216/WCB	84.83		54.67		30		45	150	
<b>BONNET</b>	WH19929	ASTM A-216/WCB	Normalized to (Normalized a) 920 °C								
<b>BODY</b>	WH18034	ASTM A-216/WCB	77.29		54.96		34		48	155	
<b>BODY</b>	WH18034	ASTM A-216/WCB	Normalized to (Normalized a) 930 °C								
<b>WEDGE</b>	D3665	ASTM A-217/CA15	98.46		71.34		27		46	278	
<b>WEDGE</b>	D3665	ASTM A-217/CA15	Normalized to (Normalized to) 955 °C								
<b>DISCO</b>			Temple a (Temper to) 630 °C								
			Enfriado en aire.(Enfriado en aire. (C)								

CERTIFICADO POR:  
 ASECURAMIENTO DE CALIDAD

CERTIFIED BY:  
 QUALITY ASSURANCE

Sandra Ruiz